



Sixth International  
Joint Meeting on  
**THORACIC  
SURGERY**  
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11<sup>th</sup> International Meeting on General Thoracic Surgery



10<sup>th</sup> International Workshop on Surgical Exploration of the Mediastinum and Systematic Nodal Dissection



5<sup>th</sup> Meeting of the Thoracic Oncology, Thoracic Surgery, Techniques & Transplant, Respiratory Nursing and Respiratory Physiotherapy Areas of the Spanish Society of Pneumology and Thoracic Surgery (SEPAR)



3<sup>rd</sup> Joint Meeting of the Spanish Society of Thoracic Surgery (SECT)



30<sup>th</sup> Congress of the "Asociación Iberoamericana de Cirugía Torácica" AIACT



10<sup>th</sup> International Workshop on Surgical Exploration of the Mediastinum and Systematic Nodal Dissection



## DEFINITIONS AND PATIENT SELECTION

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Non-small cell lung cancer (NSCLC) is the leading cause of cancer-related death worldwide. Up to 70% of all NSCLC patients present with already metastasized stage IV and are treated with systemic therapy alone as the current standard of care (SoC). Despite improvement of systemic therapy with excellent response rates, the median progression free survival (PFS) ranges between 5.6 to 25.7 months. The term “oligo metastasis” was initially introduced by Hellman and Weichselbaum to describe a state of limited disease burden despite the presence of distant metastasis, referring to patients with a specific number of limited number metastases in a limited number of organs. The European Organisation for Research and Treatment of Cancer Lung Cancer Group has defined synchronous oligometastatic disease as one involving a maximum of 5 metastases and 3 organs. There is a lack of general consensus on a uniform definition of the oligometastatic NSCLC state, and no single therapeutic perspective has been adopted across institutions.

To date, there are no recommendations about additional treatments for residual disease in patients responding to initial systemic therapy. Such approaches, named “local ablative therapy” (LAT), comprise surgical resection and/or radiotherapy to all residual lesions. Patients with OMD NSCLC can benefit from the addition of LAT to systemic therapy, and morbidity and mortality are low with the advances in surgery and in radiotherapy. Several retrospective cohort studies have documented promising outcome of so-called “salvage surgery” in these situations with median overall survival (OS) of 9-75.6 months, 5-year survival rates of 20-75% and increased PFS ranging from 5.9 to 43.6 months. A key determinant is careful patient selection, meaning performance status, controlled primary tumor, limited nodal burden, and if metachronous presentation, disease free interval. Selection according to response after “induction” systemic treatment seems a good approach to avoid overtreatment. A comprehensive understanding of molecular mechanisms in OMD might help to support biomarker driven selection but still requires in-depth analyses of resected tissue and liquid biopsies.

Key references:

- Siegel RL, Miller KD, Jemal A. Cancer statistics, 2020. *CA Cancer J Clin* 2020;70:7-30.
- Guckenberger M, Lievens Y, Bouma AB, et al. Characterisation and classification of oligometastatic disease: a European Society for Radiotherapy and Oncology and European Organisation for Research and Treatment of Cancer consensus recommendation. *Lancet Oncol* 2020;21:e18-e28.
- Surgery for oligometastatic non-small cell lung cancer. Antonoff MB, Deboever N, Werner R, Altan M, Gomez D, Opitz I. *J Thorac Cardiovasc Surg*. 2024 Feb;167(2):508-516.e1. doi: 10.1016/j.jtcvs.2023.09.048. Epub 2023 Sep 29.